

**PATENT****AMENDMENTS TO THE CLAIMS**

Following is a complete set of claims as amended with this Response. This complete set of claims includes amended claim 7.

1. (Original) In an implantable cardiac stimulation device for implant within a patient, a system comprising:

a pacing unit operative to deliver primary pacing pulses and backup pacing pulses to the ventricles of the heart;

a capture detection unit operative to detect loss of capture of both primary pacing pulses and backup pacing pulses in the ventricles; and

a capture-based ventricular tachycardia detection unit operative to detect a ventricular tachycardia based upon loss of capture of a ventricular backup pulse as detected by the capture detection unit.

2. (Original) The system of claim 1 wherein the pacing unit delivers pacing pulses at a pulse magnitude less than a predetermined maximum pulse magnitude and delivers a backup pulse at the maximum pulse magnitude upon detection of a loss of capture of a primary pacing pulse.

3. (Original) The system of claim 1 further comprising:  
a stimulation threshold search unit operative to determine a ventricular capture threshold for primary pacing pulses.

4. (Original) The system of claim 3 wherein the stimulation threshold search unit is activated if a programmable number of consecutive pacing pulses do not capture but corresponding backup pulses do capture.

5. (Original) The system of claim 4 wherein the stimulation threshold search unit is activated if a first predetermined number of pacing pulses do not capture within a second predetermined number of delivered pulses.

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6. (Original) The system of claim 1 further comprising:  
an shock therapy unit operative to deliver shock therapy to the ventricles upon the detection of tachycardia by the tachycardia detection unit.
7. (Currently Amended) The system of claim 6  
wherein the pacing ~~unit~~ unit is controlled to provide preventive overdrive pacing whenever a ventricular tachycardia is not detected and wherein the shock therapy unit is controlled to deliver shock therapy to the ventricles upon detection of a ventricular tachycardia.
8. (Original) In an implantable cardiac stimulation device having a pacing unit and capture detection unit for implant within a patient, a method comprising:  
delivering primary pacing pulses to the ventricles of the heart;  
verifying capture of the primary pacing pulses;  
delivering a backup pulse to the ventricles of the heart upon detection of a loss of capture of a primary pacing pulse;  
verifying capture of the ventricular backup pacing pulses;  
detecting a ventricular tachycardia based upon detection of loss of capture of a backup pulse in the ventricles as detected by the capture detection unit.
9. (Original) The method of claim 8 wherein delivering primary pacing pulses is performed to deliver pulses at a pulse magnitude less than a predetermined maximum pulse magnitude and wherein delivering a backup pulse is performed to deliver the backup pulse at the maximum pulse magnitude.
10. (Original) The method of claim 8 wherein the stimulation device comprises a stimulation threshold search unit operative to determine a capture threshold for pacing pulses and wherein the method further comprises:  
performing a stimulation threshold search using the stimulation threshold search unit if a primary pacing pulse is not captured but a backup pulse is captured.

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11. (Original) The method of claim 10 wherein delivering primary pacing pulses to the heart is performed in accordance with preventive overdrive pacing.

12. (Original) The method of claim 8 wherein the stimulation device comprises a shock therapy unit operative to deliver shock therapy to the ventricles and wherein the method further comprises:

delivering shock therapy to the ventricles if both a primary pacing pulse and a backup pulse are not captured in the ventricles.

13. (Original) In an implantable cardiac stimulation device for implant within a patient, a system comprising:

means for delivering primary pacing pulses to the ventricles of the heart;

means for verifying capture of the primary pacing pulses;

means for delivering a backup pulse to the ventricles of the heart upon detection of a loss of capture of a primary pacing pulse; and

means for verifying capture of the ventricular backup pacing pulses; and

means for detecting a ventricular tachycardia based upon loss of capture of a ventricular backup pulse.